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ARIZONA CORPORATION COMMISSION

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Arizona Corporation Commission
DOCKETED

OCT 21 2010

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**Re: 2011 REST Implementation Plans; Request for additional information in
advance of November workshop; Docket Nos. [REDACTED]
[REDACTED] E-01575A-10-0308; [REDACTED]**

Dear Parties to the Dockets:

As you know, the Commission will be reviewing your Companies' respective 2011 Renewable Energy Standard and Tariff ("REST") Implementation Plans in the next couple of months. The plans you have submitted contain several new programs, which will require analysis by the Commission. In addition, some existing programs have become so successful that they are oversubscribed, raising questions about how to support them so that they remain viable and available to your customers. The Commission will be holding a workshop in November to consider the Implementation Plans, and in advance of that session I would like to request additional information regarding your 2011 Plans.

Residential Distributed Energy Programs

First, as recent months have shown, interest in solar among Arizona residential consumers has taken off, and the success of your respective solar rebate programs has become increasingly evident. From my perspective, the "problems" associated with this escalation in demand are a welcome departure from just two years ago, when we were concerned about the failure of the utilities to meet their compliance targets for residential Distributed Energy ("DE") under the RES. That said, we now have an obligation to attempt to smooth out the turbulence in the DE solar programs, so that customers will have a better idea of what solar systems are going to cost in the future, when they are likely to receive their rebates and thus actually install systems, and so that the solar installation and manufacturing industries will have a more transparent view into the market.

To this end, APS has proposed a step-down for its incentive program in which the rebate would decrease by a small percentage once a certain number of Megawatts of residential DE is installed.¹ I would like to know whether the utilities and the Parties to this docket believe that a step-down should be based on more factors than merely a Megawatt achievement. Incorporation of additional factors would ensure more fulsome coordination with the state of the market before incentives were decreased. Reliance on a Megawatt factor alone could result in step-downs even where prolonged time elapsed, suggesting a slowed market. In addition to Megawatts installed, should the incentive step-down also be based on the price of modules, or the payback period of systems at the time of a proposed decline in incentives, in particular whether the payback is at seven years or lower at the time of the proposed incentive drop, or the status of state and federal tax credits, or on the overall price of a solar system to the customer? If not, please state your reasons, and whether you would recommend some other set of triggers for stepping down the incentives.

With regard to APS' proposed rapid \$1/watt reservation proposal, a number of installers have expressed concerns that this would distort the residential solar market in various ways, including potentially allowing less than scrupulous installers to sell at \$1/watt, knowing that they could not or would not deliver at that price, thus "jumping" certain systems to the front of the line that do not belong there. Moreover, even some of the state's

¹ APS Renewable Energy Standard Implementation Plan for 2011-2015, page 18.

largest and most cost-aggressive installers indicated during the Commission's most recent Open Meeting on the topic of incentives that \$1/watt is extremely aggressive. One installer suggested that a rapid reservation at an amount higher than \$1/watt, but lower than \$1.60/watt, would suffice to achieve the objectives of the proposal, which is to stretch our precious ratepayer dollars as far as they can go, while driving down the installed cost of solar in Arizona. I would like your Companies and the Parties to these dockets to respond to the question of whether \$1/watt rapid reservation has been appropriately priced or should be offered at all.

Additionally, I would like the utility Companies to provide the Commission with a detailed assessment of the status of your commercial PBI programs, in particular, please state the number of non-residential DE systems and total megawatts that have been installed since the onset of the REST, your actual installed compliance numbers for 2009 and 2010, expressed in systems and megawatts, as a percentage of your compliance requirement and in numerical terms. If you have systems that have been granted reservations but are not yet installed, please notate where the systems are in the process, and how many systems are close to falling out of your queue for failure to meet a milestone. Please also provide a status update of your schools program – how many and which schools have installed solar, total systems and megawatts, and how many and which schools are nearing installation.

I have been struck in recent months by the overwhelming support and enthusiasm among Arizonans for solarizing their rooftops. This level of demand has outstripped even the expectations of this ardent advocate for rooftop solar. Indeed, while I believe that APS, TEP, UNS Electric and the state's cooperatives are making sincere efforts to install utility scale renewable energy projects in their respective service territories – and that they will eventually succeed – the overwhelming evidence to date is that Arizona consumers are the driving force behind Arizona going solar. Commissioner Pierce has spoken passionately in the past about the need to let the market decide where we spend our renewable energy dollars, and while I have been an opponent of allowing such flexibility in our REST budgets, what I have seen occurring in the residential solar market has to some degree changed my views on this question. I find myself wondering what we could do in this next round of Implementation Plans to accommodate this demand for residential solar, indeed, what we can do to stop pulling back on the reins of the horse that is leading our utilities toward a more balanced and sustainable energy portfolio.

Therefore, I would like to invite the Parties to these dockets to make proposals for enabling the further expansion of the residential solar market, while keeping in mind the need to keep the RES surcharge in check during these difficult economic times. Specifically, I would like the Parties to the docket to address the following possible courses of action regarding the residential distributed energy programs:

- Allowing for flexibility between the residential and commercial distributed energy budgets, at least in the amount of \$20 million, which mirrors the amount that the Commission allowed APS to move out of the residential program and into the

commercial budget, in 2009. This action was at least partially responsible for the current shortfalls being experienced in the APS residential program.

- Moving any unused or available funding from any REST budget or program and into the residential programs. Please state whether your Companies currently have any unused funds in your various REST programs, and whether you anticipate that these funds will remain untapped through the end of the year.
- Please state whether you believe your Company will have any unused renewable generation funds, or whether you believe that any renewable generation projects you believed would move forward in 2011 may not move forward under the circumstances at the time of the workshop. If not, please state whether you believe some of the funds slated for these projects could be budgeted for the residential program.
- Though it would be difficult to increase the surcharge beyond the amount proposed by APS, TEP, UNSE and the cooperatives in their respective implementation plans, I would like the Companies to calculate what amount of an increase to the adjustor mechanisms would be needed to address the entire residential DE backlog at each company, 50 percent of the backlog and 25 percent of the backlog. Additionally, please calculate how much of the backlog would be addressed if we increased the adjustor mechanisms five and ten percent above the amount called for by the utilities in their 2011 Implementation Plans.
- Allowing commercial and residential distributed energy projects to fill 10, 25 or 50 percent of the gap created by the potential failure of a utility-scale project.

Distributed Energy Small Generation

Concerns have arisen in recent weeks regarding the appropriateness of allowing extremely large small generation projects like the one proposed for the Freeport-McMoran mine near Bagdad to count toward the Companies' non-residential Distributed Energy compliance targets. Specifically, I worry that doing so could push smaller distributed commercial projects out of contention, if all or most of the utilities' budgets are consumed by "mega-distributed" projects. Please tell the Commission how many such projects you envision signing contracts with, or have signed contracts with, and how much of your overall non-residential DE compliance targets will be met by them. In addition, please state how many 1 Megawatt and above distributed generation projects you anticipate signing contracts with, or have signed contracts with, how much of your non-residential renewable energy requirements will be utilized by those projects as a percentage and in a dollar amount, and whether all of those will provide energy behind the customers' meters.

Viability and Security Deposits

One of the concerns I have developed regarding your Companies' wholesale, distributed small generation and utility-scale programs is that some of the projects that are ultimate "winning" RFP's in these programs may not possess the kind of financial backing requisite

to "crossing the finish line". Current programs offer little to no penalty for speculative participation, encouraging parties to make unrealistic proposals which have minimal chance of success. The low up-front costs of participation likely crowd out more viable projects and delay compliance with Commission requirements.

It is my understanding that several jurisdictions have addressed this problem by instituting a security deposit for all projects that bid into RFP's or that are short-listed under RFP's.² I would like the Companies and the Parties to the dockets to comment on the wisdom of establishing enhanced up-front security deposits for Arizona's RFP and PBI-based renewable energy programs, and the appropriate level such a deposit should be established at to ensure that projects signed by the utilities actually get built.

Utility-scale generation

I would like to take this opportunity to pose several questions regarding the Companies' utility-scale, renewable generation program. Last year, APS announced that it was terminating its PPA with the Starwood generating station, a utility scale concentrating solar project slated for the area near the Palo Verde Nuclear Generating Station. In the case of both APS and TEP, your Companies have signed aggressively priced PPA's with several renewable energy developers, and some of those projects face critical milestones in the coming months involving their ability to secure the equity and debt needed to move forward with construction. Should such projects fail to make it across the finish line, it would appear to me that some utilities could be left with a donut hole in their utility-scale generation requirements under the RES, which for APS, are double those of other utilities as a result of the most recent APS Settlement Agreement.³ Moreover, I have been approached by several developers of utility scale solar projects that have already received Certificates of Environmental Compatibility, who have informed me that they have so far been unable to interest the state's major utilities in serving as an off-taker for their energy.⁴

With specific regard to whether the utilities may experience a gap in their utility-scale renewable generation requirement under the RES as a result of one or more signed PPA's falling through, I would like the Companies to detail for the Commission how they intend to address such potential shortfalls, if they occur. I believe that such a "Plan B" for 2011 should be addressed in the 2011 Implementation Plans. Additionally, please prepare a

² For Example, Ontario's FIT requires a series of fees at three stages: an application fee at the bid stage (\$20/kW), security posted upon contract execution (\$50/kW), and security posted upon a notice to proceed (\$75/kW).

³ The Settlement Agreement calls for APS to generate an additional 1.7 million MWhs of renewable energy by the year 2015.

⁴ Of course, some of this failure to launch could be the result of the fact that Arizona's Renewable Energy Standard is too low. As Arizonans, I believe it is time to begin studying whether we want to join the ranks of our neighboring states in raising the RES to levels that will actually encourage our utilities to buy energy from the solar energy projects that this very Commission is approving through its Power Plant and Line Siting process.

detailed account of where your utility-scale projects stand and which critical milestones remain to be met in the next two years.

Feed-in Tariff proposals (Wholesale Distributed Generation)

Lastly, I am interested in further exploring APS and TEP's proposals to introduce a Feed-in Tariff, designed to allow the Companies to purchase wholesale renewable energy at a fixed price. As you are no doubt aware, there has been intense interest in the Commission's proposed Policy Statement on Feed-in Tariffs, as well as the inaugural FIT proposals made in your 2011 Implementation Plans. I am interested in exploring whether you believe the total program size of the fixed-price offer portion of your FIT proposals should be increased to allow for greater market participation. Please state whether you believe it would be appropriate and feasible to increase the budgeted amount for the fixed-price FIT by 25 percent. If not, please state your reasons, or a counter proposal. Additionally, it would appear that APS and TEP propose to count this energy toward their DE requirements.⁵ Additionally, I would like the Parties to the dockets to state whether they believe it would be in the public interest to include as a provision in the FIT program a requirement that solar developers taking advantage of the FIT make a good faith effort to utilize solar equipment manufactured in Arizona. Finally, I am interested in knowing whether the Parties to these dockets believe the Commission could count the FIT energy toward the utilities' utility-scale REST requirements and budgets, which is where I initially anticipated this proposed new program would be housed. With regard to TEP's FIT proposal, I am concerned that the plan laid out by the Company includes too many threshold requirements to be considered a true FIT, such that it would resemble an RFP process. I would like TEP to elaborate on how it arrived at its FIT design.

Research and Development/Studies

Finally, as noted above, several high profile utility-scale solar projects – including several that have already received Certificates of Environmental Compatibility from the Commission – have either been dropped by their developers or have not yet received PPA's with an Arizona utility. This leads me to wonder whether the Commission should begin examining an expansion of the RES.⁶ As I have noted several times in the past, most of Arizona's neighboring states have increased their RPS' above Arizona's, including California (33 percent by 2020); New Mexico (20 percent by 2020); Colorado (30 percent by 2025); and Nevada (30 percent by 2025). The fact that Arizona's RES hovers below those of our neighboring states could place us at a competitive disadvantage in the

⁵ APS Renewable Energy Implementation Plan, page 25 and TEP Renewable Energy Implementation Plan, page 11.

⁶ Recently, Tessera Solar announced it was backing out of a utility-scale project with the City of Phoenix. The Arlington Valley I and II solar projects, which received CEC's from the ACC have yet to sign a PPA with a utility. Additionally, Starwood Solar was forced to back out of its PPA agreement with APS due to the loss of its partner in the deal, Lockheed Martin. And we learned just this week that the Hualapai Valley Solar project that we certificated in Mohave County does not have a PPA with an Arizona utility, but rather is pinning most of its hopes now on receiving a PPA from a Nevada utility.

procurement of this resource, at precisely the time when the resource is declining in price, and while traditional resources are increasing in price. The desire to diversify our energy portfolio with cost-effective resources remains as relevant today as it was in 2006 when we passed the RES.

In order to do this, however, I believe the Commission would require additional information, akin to the data that was gathered in advance of the creation of the RES.⁷ Therefore, I would propose, and invite reaction to, the commissioning of a study, as well as potentially the re-constitution of the Cost Evaluation Working Group, to examine the costs and benefits associated with increasing the Standard. Please state your opinion regarding such a study, and what level of funding it would require. If the Parties do not believe it is necessary or prudent to study increasing the RES, then I would propose that we undertake a study of the costs and benefits associated with Arizona becoming an exporter of renewable energy to our neighboring states,⁸ something that would appear to be increasingly likely, given Arizona's bountiful solar resources and our business-friendly environment and the larger renewable energy requirements of our neighboring states.

Additionally, as we discussed at a recent Staff Meeting, there continues to be interest in exploring how and whether to regulate third party providers of distributed solar energy, where those providers are engaged in projects with commercial, for profit entities.⁹ At that recent Staff Meeting, the Commission agreed to open a generic docket¹⁰ to examine these questions, and I would like to know whether the Parties believe it would be appropriate to utilize some RES funding to conduct a study of the issues surrounding regulation of for-profit third party solar systems, in advance of any future Commission action on this matter.

With specific regard to research and development, I am interested in seeing an R&D proposal for battery or compressed air storage included in this year's implementation plans. I would like both APS and TEP to come to the workshop prepared to discuss the potential for such an R&D project, in light of the efforts on storage occurring in both California and Texas.¹¹

Finally, I have been very pleased with the research and development projects that the utilities have engaged in, in large part with the state's universities, through the RES. A number of the projects would appear to have clear near and long term benefits for Arizona ratepayers associated with them. However, I believe it would be helpful for the ratepayers – who are the ultimate benefactors and beneficiaries of these projects – to have an

⁷ The Commission, through its Cost Evaluation Working Group, conducted a study entitled, "Costs, Benefits and Impacts of the Arizona Environmental Portfolio Standard," issued on June 30, 2003.

⁸ It would seem possible that both topics could be undertaken in the same study.

⁹ As all Parties know, the Commission decided not to regulate third party providers engaged in projects with non-profits, schools and government entities, in Decision No. 71795.

¹⁰ Docket Number E-00000A-10-0368, In the Matter of the Commission's Generic Docket for the Gathering of Information Concerning Third Party Transactions for Distributed Solar Generation for Commercial and Residential Systems.

¹¹ See my August 24 letter to Mr. Guldner of APS and Mr. Heyman of TEP.

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opportunity to better understand their purpose and results. Therefore, I would like to request that each entity that has received funding through the RES for an R&D project, to prepare a detailed written description of that project, in a format that is suitable for presentation on the Arizonagoessolar.org website. I would like these written reports to be presented to the Commission in time for our vote on the 2011 Implementation Plans, and would like for them to be a part of every Implementation Plan going forward, subject to the agreement of my Colleagues on this point.

It would be helpful for Parties to provide written responses in advance of the Commission's workshop on the 2011 RES Implementation Plans; however, to the degree you are unable to complete written responses, please come prepared to the workshop to provide verbal replies to my inquiries. Thank you for your attention to this matter and I look forward to our continued examination of these issues

Sincerely,

Kris Mayes
Chairman

cc: Commissioner Gary Pierce
Commissioner Sandra Kennedy
Commissioner Paul Newman
Commissioner Bob Stump
Ernest Johnson
Steve Olea
Janice Alward
Lyn Farmer
Rebecca Wilder